PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : William J. Ossmann

Examiner: M. O. Budd

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For : ULTRASOUND TRANSDUCER

Assistant Commissioner for Patents
Washington, D.C. 20231

MARKED-UP VERSIONS OF THE AMENDMENTS

Sir:

Marked-up versions of the amendments in accordance with 37 C.F.R. § 1.121 are provided below:

Marked-Up Versions of the Replaced Claims 1 and 18:

1. An acoustic imaging system, comprising:

a transducer including a two-dimensional transducer element matrix array, the transducer having a protective cover configured to mate with a transducer body, the protective cover superposed above the two-dimensional transducer element matrix such that acoustic energy

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this Amendment and any document referred to as enclosed herein is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Dated: June 26, 2002

Adrienne Fagan
(Name of Person Mailing Envelope)

Adrienne Fagan
(Signature of Person Mailing Envelope)

incident at the protective cover is mechanically directed by the protective cover and wherein the transducer element matrix array is encased by the protective cover and the transducer body; and

an image processing system coupled to the transducer and configured to provide a plurality of individualized excitation signals each being delayed by a predetermined delay with respect to each other to control respective transducer elements of the plurality of transducer elements at different times for controlling the transmit aperture of the acoustic imaging system over time such that the two-dimensional transducer element matrix array generates and transmits acoustic energy through the protective cover over time such that acoustic energy transmitted through the protective cover is electronically focused.

18. A method for acoustically imaging a patient, comprising the steps of:

providing a transducer having a two-dimensional transducer element matrix array, the transducer having a protective cover configured to mate with a transducer body, the protective cover superposed above the two-dimensional transducer element matrix such that acoustic energy transmitted from the protective cover and into the body is mechanically directed by the protective cover, wherein the two-dimensional transducer element matrix array and the protective cover are shaped to reduce patient discomfort;

generating a plurality of time delayed transmit signals each for [to] separately controlling a respective [individual] transducer element[s] of the two-dimensional transducer element matrix array to electronically focus acoustic transmit waves that traverse the protective cover; and

receiving a plurality of time delayed response echoes at the separately controllable individual transducer elements of the two-dimensional transducer element matrix array to electronically focus acoustic receive echoes that traverse the protective cover.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call John Vodopia, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-333-9627.

Respectfully submitted,

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